



# 3Rs Literature Search Guide

For studies including animal experiments a literature analysis is essential to prove that no alternatives to the use of animals are available, the adequate animal model / methods are used and the 3R principles are implemented.

This information is requested in Form A ([Application for licence to perform animal experiment](#)): i.e. section 20, 25, 26, 35, 38 and 39.

## Search techniques

- Boolean Operators: AND, OR, NOT
- Parentheses: specify operator precedence
- Truncation: word variations (cell\*: cell, cells, cellulose, etc.)
- Phrase Search: specific word order ("mouse model")
- Specific fields (title, abstract, keywords, etc.)
- Subject headings (e.g. MeSH, Emtree)
- Tips for [systematic searching](#)

## Search strategy

- Define a search question.
- Define search terms (incl. synonyms).
- Use appropriate literature database(s) and specific database search techniques.
- If necessary modify search by using other terms, subject headings, etc.
- Report & save your search history.

## More information

- E-Learning course: [Searching for \(existing\) non-animal alternatives](#)
- [EURL ECVAM search guide](#)
- Search tutorial: [3Rs-Centre ULS](#)
- [PubMed Online Training](#)

## Literature databases

### Free access

[PubMed](#) (3Rs search filter [Altbib](#))  
[PMC](#) (PubMed fulltext search)  
[Google Scholar](#) (incl. fulltext search)  
[Springer Nature Experiments](#) (search for protocols)  
[Specific search filters for PubMed & Embase](#)

### Access within IP range UZH

[Embase](#) (subject heading Emtree)  
[Web of Science](#) (WoS)  
[Scopus](#)

## Contact

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**Main Library and Office for Animal Welfare & 3R**

In addition to the search in databases consult also specific 3Rs journals. Most journals are indexed in the common databases.

	PubMed	PMC	Embase	WoS	Scopus	GS
<b>Replacement</b>						
<a href="#"><u>Altex</u></a>	✓		✓	✓	✓	✓
<a href="#"><u>ATLA</u></a>	✓		✓	✓	✓	✓
<b>Reduction</b>						
<a href="#"><u>Laboratory Animals</u></a>	✓		✓	✓	✓	✓
<b>Refinement</b>						
<a href="#"><u>Animals</u></a>	✓	✓	✓	✓	✓	✓
<a href="#"><u>Animal Welfare</u></a>	✓		✓	✓	✓	✓
<a href="#"><u>Comparative Medicine</u></a>	✓		✓	✓	✓	✓
<a href="#"><u>ILAR Journal</u></a>	✓	✓	✓	✓	✓	✓
<a href="#"><u>JAALAS</u></a>	✓	✓	✓	✓	✓	✓
<a href="#"><u>Journal of Applied Animal Welfare Science</u></a>	✓		✓	✓	✓	✓
<a href="#"><u>JOVE</u></a> (publishes videos of procedures)	✓	2006-2008	✓	✓	✓	✓
<a href="#"><u>Lab Animal</u></a>	✓	some articles	✓	✓	✓	✓
<a href="#"><u>Laboratory Animal Science Professional</u></a>						
<a href="#"><u>Scandinavian Journal of Laboratory Animal Science</u></a>	some articles		✓	✓	✓	✓
<b>All 3Rs (examples)</b>						
<a href="#"><u>PLOS One</u></a>	✓	✓	✓	✓	✓	✓
<a href="#"><u>Scientific Reports</u></a>	✓	✓	✓	✓	✓	✓